

BRUCELLOSIS ERADICATION

PROGRAM PROFILE

Goal	To eradicate brucellosis from domestic cattle and swine.
Enabling Legislation	21 USC 114; Animal Industry Act of 1884.
Economic Significance	The livestock and dairy industries and the U.S. consumer have realized great financial savings from the success of the brucellosis eradication program. Annual losses from lowered milk production, aborted calves and pigs, and reduced breeding efficiency have decreased from more than \$400 million in 1952 to less than \$1 million today. Studies have shown that if brucellosis eradication efforts were stopped, the cost of producing beef and milk would increase by an estimated \$80 million annually in less than 10 years.
Principal Approach and Methods Used to Achieve Goals	A cooperative Federal-State eradication program. Program methods used are inspection, testing, quarantine, vaccination, and herd depopulation.
History	Program began in 1934. Disease incidence reduced from 11.5 percent at outset to 2.4 percent by 1941. Program became an eradication program and began to accelerate in 1954. In 1989, APHIS adopted the Rapid Completion Plan (RCP) for the eradication of brucellosis. The RCP was designed to accelerate critical activities within the current operational structure of the program. In 1997, APHIS implemented the Brucellosis Emergency Action Plan (EAP). The plan supplements the RCP and includes primary and secondary testing methods; depopulation; investigating and monitoring high risk herds; epidemiological investigations; and quarterly program reviews in each Class A State. As the programs comes to an end, APHIS will begin focusing its efforts on eradicating brucellosis from the free-roaming bison of Yellowstone National Park and other wildlife and alternative livestock species.
State and Local Cooperation	State governments cooperate by providing personnel to conduct inspection, detection, and eradication activities. States also cooperate by providing funds for vaccination,

collecting blood samples from cattle for testing, indemnities, supplies, and other direct program costs. Industry cooperates by encouraging producers to participate in the program, through information provided in industry journals, and through consultation with the Department and professional societies. Individual producers cooperate by assuming the cost of making their herds available for evaluation, testing, and vaccination.

Involvement of Other Agencies National Park Service; FWS; Communicable Disease Center; Packers and Stockyards; FS; BLM; ES; FSIS; and ARS.

RESOURCE DATA

-----Obligations-----

	<u>Direct</u>	<u>Reimbursement</u>	<u>User Fees</u>	<u>Staff-Years</u>	
FY 1997	22,037,449	--	--	154	
FY 1998	19,494,073	--	--	107	
FY 1999	12,006,629	--	--	77	
FY 2000 (est.)	10,876,000	--	--	65	
FY 2001 (est.)	8,227,000	--	--	55	
					Contingency
	<u>APHIS</u>	<u>Coop</u>	<u>Total</u>	<u>CCC</u>	<u>Fund</u>
Cum.	\$1,772,036,344	\$2,336,051,355	\$4,108,087,699	\$64,685,568	--

RECENT ACCOMPLISHMENTS

Status of Brucellosis Program FY 1999 was a significant year in the National Brucellosis Eradication Program. Newly disclosed affected herds under quarantine continued to decline. APHIS found 27 newly infected herds in FY 1999, down from 49 in FY 1998, a decrease of almost 45 percent. There were 9 herds quarantined at the end of FY 1999, compared to 8 at the end of the prior year.

State Status Two States, Mississippi and Kansas, attained Class Free status in FY 1999. No States lost their Class Free status in FY 1999. As of September 30, 1999, 44 States, as well as the District of Columbia, Puerto Rico, and the U.S. Virgin

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Islands, were in Class Free status. Six States: Florida, Louisiana, Missouri, Oklahoma, South Dakota, and Texas, were in Class A status. These six States are in the qualifying stage for Class Free status. A state must stay in the qualifying period for one full year before applying for Class Free status.

Reactor Herds

Of the estimated 35 reactor herds found in FY 1999, 24 (69 percent of the national total) were located in Texas. The States of Missouri with 5 affected herds; Oklahoma with 3 affected herds; Florida with 2 affected herds; and South Dakota with one affected herd, together represented the remaining 31 percent.

Herds Depopulated

In FY 1999, the program depopulated 29 herds at a cost of \$2 million. Depopulation continues to be the preferred method of handling infected herds under the Rapid Completion Plan (RCP). FY 1999 marks the tenth year of operation under the RCP.

Brucellosis in Yellowstone National Park

The Yellowstone National Park (YNP) Environmental Impact Statement (EIS) for bison management became available for public comment in the summer of 1998. It includes seven separate alternatives that could be implemented by the National Park Service (NPS) in their bison management plan for bison in YNP. The comment period was open until October 1998. Over 67,000 comments were received and are currently being analyzed by the NPS.

RB51 Brucella Vaccine

In FY 1999, research continued on the RB51 vaccine in bison and in Greater Yellowstone Area eradication efforts. During FY 1999, 90 bison migrated out of the Park and were slaughtered to prevent transmission of brucellosis to surrounding livestock. These animals tested positive through blood samples. Another 52 animals were tested negative outside of the Park and were captured and released back into the Park.

Swine Prevalence

In FY 1999, no additional states attained brucellosis-free status. Currently, there are 46 validated-free states. The remaining four States, Arkansas, Florida, Louisiana, and Texas, are in non-validated status and are considered Stage

II. At the end of FY 1999, there were two infected swine herds in the United States, both in Florida.

During FY 1999, feral swine exposure was a common source of herd infection. APHIS discovered 18 newly infected herds. A total of 18 herds (not necessarily the 18 newly infected herds) and 1,161 swine in 4 states were depopulated during FY 1999, at a cost of \$80,845.